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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,706	09/30/2004	Arash Massoudi	16906.5.1	5705
22913 7590 06/27/2007 WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111			EXAMINER WU, JUNCHUN	
			ART UNIT 2191	PAPER NUMBER
			MAIL DATE 06/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/711,706	MASSOUDI, ARASH	
	Examiner	Art Unit	
	Junchun Wu	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-19 are pending in this application.

Claim Objections

2. Claim 2 objected to because of the following informalities:

Claim 2 contains period (.) in the middle of paragraph should be changed to a comma (,).

It is recommended that applicant rewrite claim 2 as to properly define the system (or method) with steps or acts that begin with an active verb.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1 and 17 are rejected under 35 U.S.C. 101 because claims 1 and 17 fail to claim a software recorded on a computer readable medium so as to be structurally and functionally interrelated to the medium and permit the function of the descriptive material to be realized. Therefore, claims 1 and 17 should be rejected as non-statutory.

5. Claims 2-16 are dependent of claim 1 so they are rejected as the same reason as above.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-19 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

For example, the claims 1 and 17 are narrative in form and replete with indefinite and functional or operational language. In claim 1 recites “such as, but not limited to ‘web services’” and in claim 17 recites “the invoker the in-memory (i.e. within the address space...)”. Those structures that go to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device.

8. Claims 2-5 recite “the system of claim 1 further comprising a method...”. Those claims are not clear what applicant intends to claim a system or method claim.

9. Claim 4 recites “the implementation time of the system functionality”. The claim lacks proper antecedent basis .

10. Claims 6-13 depend on the claim 2, suffers the same deficiency as claim 2.

11. Claim 18 recites “the rest of the system”. It is not clear what the term “rest of the system” means.

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12. Claim 19 recites "all other methods and systems explicit or implicit". It is not clear what the scope is for the claim.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-3, 5-15, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Lai (US Pub. No.20050044197 A1).

14. Per claim 1

Lai discloses

- The system for construction of a customizable software system and framework, including a server infrastructure and a set of management and design tools, for management and development of software modules as services, such as, but not limited to, "Web services", (see [Abstract]) where the constructed system uses software service modules, implemented through itself and based on the functionality provided to the end-users of the system, to implement its own software functionality ([0453] "*One general principle is that a Web Services-based solution is preferably built to satisfy user requirements at the time of delivery, where user requirements may evolve with a better understanding of the system and integration capability.*").

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15. Per claim 2

the rejection of claim 1 is incorporated and Lai further discloses

- a method of communication between software management and design tools developed for supporting the functionality of such system and the runtime platform of the system through a set of software service modules implemented through the system ([1093] *"The Multi-Step Application Integration design Pattern preferably eases the workflow management of complicated multi-step processes by using flexible messaging and data transformation. This Web Services integration pattern may reuse existing similar processes and turn them into Web Service components"*). Wherein, the communication accomplishes transparent distribution for the parts of the system as consumers of software services from the parts of the system as producers of software services ([547] *"The SOAP client may then generate a SOAP request in an XML document and send it to the SOAP server..."*).

16. Per claim 3

the rejection of claim 1 is incorporated and Lai further discloses

- a method of rapid convergence of quality during the construction and advancement of the software system ([0236] *"A benefit of using Web Services is to enable interoperability and integration among Processors, trading partners, and credit card company with reusable data over the existing infrastructure...."*).

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17. Per claim 5

the rejection of claim 2 is incorporated and Lai further discloses

- a method of creating a high-degree of customizability through the exposure of system functions as consumable software services ([0833] “to be able to make use of common business information, developers may need to build a custom adapter for each front-end or application system, because each front-end or application system may only support its own data format.”).

18. Per claim 6

the rejection of claim 2 is incorporated and Lai further discloses

- a service log manager tool for managing, viewing and analyzing the services dispatched through the system that uses a set of software services to interact with the system ([1202] *“Each transactional Web Services call is preferably logged at the level of Web Services invocation and transport layer. This is in addition to the transaction log taken by the local or remote applications. In such a case, administrators may track and trace the service request at different points within the life cycle.” & Fig.105A see Log Files*).

19. Per claim 7

the rejection of claim 2 is incorporated and Lai further discloses

- a service manager tool for managing the current running services that uses a set of software service modules to interact with the system ([0185] *“Embodiments may be used*

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in designing, implementing, and managing end-to-end Web Services solutions that may incorporate, for example, reliability, scalability, and availability.").

20. Per claim 8

the rejection of claim 2 is incorporated and Lai further discloses

- a service cache manager tool for managing the cached services within the system that uses a set of software service modules to interact with the system ([0537] *"One solution is to reduce the service look-up overhead by caching frequently accessed Web Services at the SOAP client's side. Another solution is to cache the frequently accessed Web Services at the SOAP server's side."*).

21. Per claim 9

the rejection of claim 2 is incorporated and Lai further discloses

- a system shared-memory manager tool for managing the content of the system shared memory that uses a set of software service modules to interact with the system ([0710] *"A staging Service Registry is preferable, where administrators can perform updates. There are preferably scheduled replications to synchronize the master Service Registry with the staging Service Registry."*).

22. Per claim 10

the rejection of claim 2 is incorporated and Lai further discloses

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- a consumer account provisioning manager tool used to provision and deploy service-oriented solutions that uses a set of software service modules to interact with the system ([0411] *“Service Management components provide provisioning of business services, monitoring of the service level, and metering the business services for services billing.”*).

23. Per claim 11

the rejection of claim 2 is incorporated and Lai further discloses

- a security manager tool used for user and role management that uses a set of software service module to interact with the system ([0422] *“The policy server stores access rights and policies that govern the access level of each service component or system by users and by roles. Theses security components may span two or more tiers.”*).

24. Per claim 12

the rejection of claim 2 is incorporated and Lai further discloses

- a system cluster manager used for load-balancing and managing clusters of the system that uses a set of software service modules to interact with the cluster of systems ([0960] *“Queues may be clustered to provide message-level load balancing and resilience. In other words, the workload may be shared between queues under the same cluster. When the transaction volume goes up, architects and developers may add more queues in the same machine or in another machine.”*).

25. Per claim 13

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the rejection of claim 2 is incorporated and Lai further discloses

- any management or design tool that needs to interact with the system to use a set of software service modules to interact with the system ([0411] *"Sun ONE defines a Web Services architecture with seven meta-components, with each having different architecture components to interact with one another. Each meta-component (for example, identity and policy) may include different components and services...."*).

26. Per claim 14

the rejection of claim 1 is incorporated and Lai further discloses

- the system is extended through set of software service modules to implement the system-side functionality required for supporting the functionality of such system ([0962] *"... Java technology extends the WSDL-UDDI-SOAP-based Web Services technology to provide XML data transformation using JAXP and XSLT. To address guaranteed message delivery and manageability, architects and developers may leverage the Java Messaging Service (for example, SOAP-JMS) to collaborate with SOAP messaging."*).

27. Per claim 15

the rejection of claim 1 is incorporated and Lai further discloses

- all services required for management, design and invocation of system functionality by the system are implemented as a set of software service modules (for management [1128] *"...with a web services implementation, ebXML business process management tools may be used"*) & for design [0059] *"Embodiments of a system and method for providing a*

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generic, vendor-independent Web Services architecture incorporating a structured methodology and design patterns for designing and implementing Web Services are described.” & for invocation [0629] “Web Services preferably handle invocation only, not provide recovery. Architects may reuse the session facade pattern (use of session bean to encapsulate the complexity of interactions between the business subjects participating in a workflow) in designing state management.”).

28. Per claim 17

Lai discloses

- A system of invoking software services that encapsulates from the invoker the in-memory (i.e. within the address space of the implementing system) execution of a service from an out-of-memory execution of the service (i.e. distributed such the system implementing the service is an external server) (see [0215]).

29. Per claim 18

Lai discloses

- A method of broadcasting events from service implementation modules to the rest of the system (see [0733]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lai, in view of Williams (U.S. Pub No. 20040015564).

31. Per claim 4

the rejection of claim 1 is incorporated

Lai does not disclose

- a method of reducing the implementation time of the system functionality.

But Williams discloses

- a method of reducing the implementation time of the system functionality ([0005]
“Developers are in constant need of better methods, tools, etc. for developing and implementing Web services. Reducing the time required to fully implement a Web service is a key priority”& [0023] *“A preferred method of developing Web services according to principles of the present invention can be divided into nine steps or phases that can be performed in various orders to fully implement a Web service”*)
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Lai with the teachings of Williams to include a method of reducing the implementation time of the system functionality in order to provide more and more services being offered on the internet (Williams, [0005]).

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32. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lai, in view of Koeppel (U.S. Pub. No. 20050015491 A1).

33. Per claim 16

the rejection of claim 1 is incorporated

Lai does not disclose

- the implementation of all the sets of software service modules can be replaced transparently for the purpose of customizing the system functionality.

But Koeppel discloses

- the implementation of all the sets of software service modules can be replaced transparently for the purpose of customizing the system functionality ([0005] *"Because computing systems may design their own interface protocols, the integration between different computing system components can be difficult and costly. To handle these difficulties, computing systems now invoke web services by substituting the Internet for their customized interface protocols and implementing standardized protocols"*).
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Lai with the teachings of Koeppel to include the implementation of all the sets of software service modules can be replaced transparently for the purpose of customizing the system functionality in order to create software service that is reusable and compatible with different types of computing systems. (Koeppel, [0005]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junchun Wu whose telephone number is 571-270-1250. The examiner can normally be reached on 8:00-17:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW

DETAILED ACTION

1. Claims 1-19 are pending in this application.

Claim Objections

2. Claim 2 objected to because of the following informalities:

Claim 2 contains period (.) in the middle of paragraph should be changed to a comma (,).

It is recommended that applicant rewrite claim 2 as to properly define the system (or method) with steps or acts that begin with an active verb.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1 and 17 are rejected under 35 U.S.C. 101 because claims 1 and 17 fail to claim a software recorded on a computer readable medium so as to be structurally and functionally interrelated to the medium and permit the function of the descriptive material to be realized. Therefore, claims 1 and 17 should be rejected as non-statutory.

5. Claims 2-16 are dependent of claim 1 so they are rejected as the same reason as above.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-19 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

For example, the claims 1 and 17 are narrative in form and replete with indefinite and functional or operational language. In claim 1 recites “such as, but not limited to ‘web services’” and in claim 17 recites “the invoker the in-memory (i.e. within the address space...)”. Those structures that go to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device.

8. Claims 2-5 recite “the system of claim 1 further comprising a method...”. Those claims are not clear what applicant intends to claim a system or method claim.

9. Claim 4 recites “the implementation time of the system functionality”. The claim lacks proper antecedent basis .

10. Claims 6-13 depend on the claim 2, suffers the same deficiency as claim 2.

11. Claim 18 recites “the rest of the system”. It is not clear what the term “rest of the system” means.

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12. Claim 19 recites "all other methods and systems explicit or implicit". It is not clear what the scope is for the claim.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-3, 5-15, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Lai (US Pub. No.20050044197 A1).

14. Per claim 1

Lai discloses

- The system for construction of a customizable software system and framework, including a server infrastructure and a set of management and design tools, for management and development of software modules as services, such as, but not limited to, "Web services", (see [Abstract]) where the constructed system uses software service modules, implemented through itself and based on the functionality provided to the end-users of the system, to implement its own software functionality ([0453] "*One general principle is that a Web Services-based solution is preferably built to satisfy user requirements at the time of delivery, where user requirements may evolve with a better understanding of the system and integration capability.*").

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15. Per claim 2

the rejection of claim 1 is incorporated and Lai further discloses

- a method of communication between software management and design tools developed for supporting the functionality of such system and the runtime platform of the system through a set of software service modules implemented through the system ([1093] *"The Multi-Step Application Integration design Pattern preferably eases the workflow management of complicated multi-step processes by using flexible messaging and data transformation. This Web Services integration pattern may reuse existing similar processes and turn them into Web Service components"*). Wherein, the communication accomplishes transparent distribution for the parts of the system as consumers of software services from the parts of the system as producers of software services ([547] *"The SOAP client may then generate a SOAP request in an XML document and send it to the SOAP server..."*).

16. Per claim 3

the rejection of claim 1 is incorporated and Lai further discloses

- a method of rapid convergence of quality during the construction and advancement of the software system ([0236] *"A benefit of using Web Services is to enable interoperability and integration among Processors, trading partners, and credit card company with reusable data over the existing infrastructure...."*).

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17. Per claim 5

the rejection of claim 2 is incorporated and Lai further discloses

- a method of creating a high-degree of customizability through the exposure of system functions as consumable software services ([0833] “to be able to make use of common business information, developers may need to build a custom adapter for each front-end or application system, because each front-end or application system may only support its own data format.”).

18. Per claim 6

the rejection of claim 2 is incorporated and Lai further discloses

- a service log manager tool for managing, viewing and analyzing the services dispatched through the system that uses a set of software services to interact with the system ([1202] *“Each transactional Web Services call is preferably logged at the level of Web Services invocation and transport layer. This is in addition to the transaction log taken by the local or remote applications. In such a case, administrators may track and trace the service request at different points within the life cycle.” & Fig.105A see Log Files*).

19. Per claim 7

the rejection of claim 2 is incorporated and Lai further discloses

- a service manager tool for managing the current running services that uses a set of software service modules to interact with the system ([0185] *“Embodiments may be used*

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in designing, implementing, and managing end-to-end Web Services solutions that may incorporate, for example, reliability, scalability, and availability.").

20. Per claim 8

the rejection of claim 2 is incorporated and Lai further discloses

- a service cache manager tool for managing the cached services within the system that uses a set of software service modules to interact with the system ([0537] *"One solution is to reduce the service look-up overhead by caching frequently accessed Web Services at the SOAP client's side. Another solution is to cache the frequently accessed Web Services at the SOAP server's side."*).

21. Per claim 9

the rejection of claim 2 is incorporated and Lai further discloses

- a system shared-memory manager tool for managing the content of the system shared memory that uses a set of software service modules to interact with the system ([0710] *"A staging Service Registry is preferable, where administrators can perform updates. There are preferably scheduled replications to synchronize the master Service Registry with the staging Service Registry."*).

22. Per claim 10

the rejection of claim 2 is incorporated and Lai further discloses

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- a consumer account provisioning manager tool used to provision and deploy service-oriented solutions that uses a set of software service modules to interact with the system ([0411] *“Service Management components provide provisioning of business services, monitoring of the service level, and metering the business services for services billing.”*).

23. Per claim 11

the rejection of claim 2 is incorporated and Lai further discloses

- a security manager tool used for user and role management that uses a set of software service module to interact with the system ([0422] *“The policy server stores access rights and policies that govern the access level of each service component or system by users and by roles. Theses security components may span two or more tiers.”*).

24. Per claim 12

the rejection of claim 2 is incorporated and Lai further discloses

- a system cluster manager used for load-balancing and managing clusters of the system that uses a set of software service modules to interact with the cluster of systems ([0960] *“Queues may be clustered to provide message-level load balancing and resilience. In other words, the workload may be shared between queues under the same cluster. When the transaction volume goes up, architects and developers may add more queues in the same machine or in another machine.”*).

25. Per claim 13

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the rejection of claim 2 is incorporated and Lai further discloses

- any management or design tool that needs to interact with the system to use a set of software service modules to interact with the system ([0411] *"Sun ONE defines a Web Services architecture with seven meta-components, with each having different architecture components to interact with one another. Each meta-component (for example, identity and policy) may include different components and services...."*).

26. Per claim 14

the rejection of claim 1 is incorporated and Lai further discloses

- the system is extended through set of software service modules to implement the system-side functionality required for supporting the functionality of such system ([0962] *"... Java technology extends the WSDL-UDDI-SOAP-based Web Services technology to provide XML data transformation using JAXP and XSLT. To address guaranteed message delivery and manageability, architects and developers may leverage the Java Messaging Service (for example, SOAP-JMS) to collaborate with SOAP messaging."*).

27. Per claim 15

the rejection of claim 1 is incorporated and Lai further discloses

- all services required for management, design and invocation of system functionality by the system are implemented as a set of software service modules (for management [1128] *"...with a web services implementation, ebXML business process management tools may be used"*) & for design [0059] *"Embodiments of a system and method for providing a*

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generic, vendor-independent Web Services architecture incorporating a structured methodology and design patterns for designing and implementing Web Services are described.” & for invocation [0629] “Web Services preferably handle invocation only, not provide recovery. Architects may reuse the session facade pattern (use of session bean to encapsulate the complexity of interactions between the business subjects participating in a workflow) in designing state management.”).

28. Per claim 17

Lai discloses

- A system of invoking software services that encapsulates from the invoker the in-memory (i.e. within the address space of the implementing system) execution of a service from an out-of-memory execution of the service (i.e. distributed such the system implementing the service is an external server) (see [0215]).

29. Per claim 18

Lai discloses

- A method of broadcasting events from service implementation modules to the rest of the system (see [0733]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lai, in view of Williams (U.S. Pub No. 20040015564).

31. Per claim 4

the rejection of claim 1 is incorporated

Lai does not disclose

- a method of reducing the implementation time of the system functionality.

But Williams discloses

- a method of reducing the implementation time of the system functionality ([0005]
“Developers are in constant need of better methods, tools, etc. for developing and implementing Web services. Reducing the time required to fully implement a Web service is a key priority” & [0023] *“A preferred method of developing Web services according to principles of the present invention can be divided into nine steps or phases that can be performed in various orders to fully implement a Web service”*)
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Lai with the teachings of Williams to include a method of reducing the implementation time of the system functionality in order to provide more and more services being offered on the internet (Williams, [0005]).

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32. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lai, in view of Koeppel (U.S. Pub. No. 20050015491 A1).

33. Per claim 16

the rejection of claim 1 is incorporated

Lai does not disclose

- the implementation of all the sets of software service modules can be replaced transparently for the purpose of customizing the system functionality.

But Koeppel discloses

- the implementation of all the sets of software service modules can be replaced transparently for the purpose of customizing the system functionality ([0005] *"Because computing systems may design their own interface protocols, the integration between different computing system components can be difficult and costly. To handle these difficulties, computing systems now invoke web services by substituting the Internet for their customized interface protocols and implementing standardized protocols"*).
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Lai with the teachings of Koeppel to include the implementation of all the sets of software service modules can be replaced transparently for the purpose of customizing the system functionality in order to create software service that is reusable and compatible with different types of computing systems. (Koeppel, [0005]).

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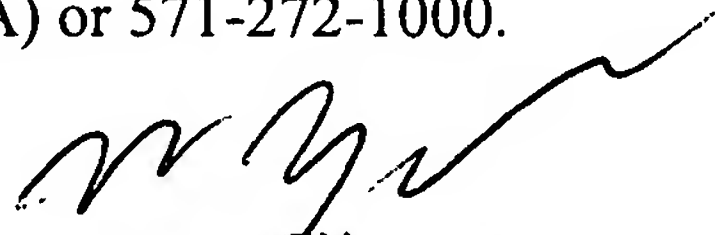
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junchun Wu whose telephone number is 571-270-1250. The examiner can normally be reached on 8:00-17:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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JW


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